

IN THE CLAIMS:

Claim 1 (currently amended): A method for embedding information into a digitally compressed bitstream, the method comprising the steps of:

providing a compressed bitstream;

determining a type of coding of the compressed bitstream
wherein the type of coding is inter coding or intra coding;

identifying locations in the bitstream for embedding data bits into the bitstream;

extracting a plurality of data bits from the locations of the bitstream;

producing embedded data bits based on the plurality of data bits from the bitstream wherein the embedded data bits are based on the coding of the compressed bitstream; and

replacing original codewords in the bitstream with alternate codewords having the embedded data bits.

Claim 2 (original): The method of Claim 1 further comprising the step of:

scanning the bitstream to find spatial locations for embedding data bits.

Claim 3 (original): The method of Claim 1 further comprising the step of:

scanning the bitstream to find temporal locations for

embedding data bits.

Claim 4 (original): The method of Claim 1 further comprising the step of:

scanning the bitstream to find spatial or temporal locations for embedding data bits that can be reliably recovered by an error resilience decoder if the bitstream is subject to errors during transmission.

Claim 5 (original): The method of Claim 1 further comprising the step of:

finding blocks wherein the blocks have a last non-zero coefficient having an index number of less than 63.

Claim 6 (original): The method of Claim 1 wherein the original codewords have a triplet form of EVENT = (RUN, LEVEL, LAST) and further wherein final codewords in the bitstream have a "LAST" coefficient = 1.

Claim 7 (original): The method of Claim 6 further comprising the step of:

replacing the final codewords so that the final codewords have a "LAST" coefficient = 0.

Claim 8 (original): The method of Claim 6 further comprising the step of:

appending alternate codewords to the final codewords in the bitstream.

Claim 9 (original): The method of Claim 8 wherein the alternate codewords = "0111s" wherein the "s" corresponds to the embedded data bit.

Claim 10 (original): The method of Claim 1 wherein the bitstream is compliant with international standards.

Claim 11 (original): The method of Claim 1 wherein the bitstream is a video bitstream.

Claim 12 (currently amended): A system for embedding information into a digitally compressed bitstream, the system comprising:
a compressed bitstream;

means for determining a type of coding of the compressed bitstream wherein the type of coding is inter coding or intra coding;

means for identifying locations in the compressed bitstream wherein the locations are based on the type of coding of the compressed bitstream;

embedded data bits produced by encrypting a plurality of data bits at the locations in the compressed bitstream; and

means for replacing original codewords in the bitstream with alternate codewords having the embedded data bits.

Claim 13 (original): The system of Claim 12 further comprising:
means for scanning the bitstream to locate blocks wherein the blocks contain the original codewords.

Claim 14 (original): The system of Claim 1 wherein the bitstream has final codewords and further wherein the locations in the bitstream for embedding data into the bitstream correspond to the final codewords in the bitstream.

Claim 15 (original): The system of Claim 13 wherein the blocks have a last non-zero coefficient having an index number of less than 63.

Claim 16 (original): The system of Claim 12 wherein the codewords have a triplet form of EVENT = (RUN, LEVEL, LAST) and further wherein final codewords in the bitstream have a "LAST" coefficient = 1.

Claim 17 (original): The system of Claim 12 further comprising: means for replacing final codewords in the bitstream with replaced codewords wherein the replaced codewords have a LAST coefficient = 0.

Claim 18 (original): The system of Claim 17 further comprising: means for appending alternate codewords to the replaced codewords wherein the appended codewords = "0111s" wherein the "s" represents the embedded data bit.

Claim 19 (original): The system of Claim 13 wherein the compressed bitstream corresponds to a compressed video bitstream.

Claim 20 (previously presented): A method for embedding

information into a digitally compressed bitstream, the method comprising the steps of:

providing a compressed bitstream;

identifying locations in the bitstream for embedding data into the bitstream;

replacing original codewords in the bitstream with alternate codewords having embedded data bits; and

finding blocks wherein the blocks have a last non-zero coefficient having an index number of less than 63.

Claim 21 (previously presented): A method for embedding information into a digitally compressed bitstream, the method comprising the steps of:

providing a compressed bitstream;

identifying locations in the bitstream for embedding data into the bitstream;

replacing original codewords in the bitstream with alternate codewords having embedded data bits wherein the original codewords have a triplet form of EVENT = (RUN, LEVEL, LAST) and further wherein final codewords in the bitstream have a "LAST" coefficient = 1; and

replacing the final codewords so that the final codewords have a "LAST" coefficient = 0..

Claim 22 (previously presented): A method for embedding

information into a digitally compressed bitstream, the method comprising the steps of:

providing a compressed bitstream;

identifying locations in the bitstream for embedding data into the bitstream;

replacing original codewords in the bitstream with alternate codewords having embedded data bits wherein the original codewords have a triplet form of EVENT = (RUN, LEVEL, LAST) and further wherein final codewords in the bitstream have a "LAST" coefficient = 1; and

appending alternate codewords to the final codewords in the bitstream.

Claim 23 (previously presented): The method of Claim 22 wherein the alternate codewords = "0111s" wherein the "s" corresponds to the embedded data bit.

Claim 24 (previously presented): A system for embedding information into a digitally compressed bitstream, the system comprising:

a compressed bitstream;

means for identifying locations in the compressed bitstream;

means for replacing original codewords in the bitstream with alternate codewords having embedded data bits;

means for scanning the bitstream to locate blocks wherein

the blocks contain the original codewords wherein the blocks have a last non-zero coefficient having an index number of less than 63.

Claim 25 (previously presented): A system for embedding information into a digitally compressed bitstream, the system comprising:

- a compressed bitstream;
- means for identifying locations in the compressed bitstream;
- means for replacing original codewords in the bitstream with alternate codewords having embedded data bits; and
- means for replacing final codewords in the bitstream with replaced codewords wherein the replaced codewords have a LAST coefficient = 0.

Claim 26 (previously presented): A system for embedding information into a digitally compressed bitstream, the system comprising:

- a compressed bitstream;
- means for identifying locations in the compressed bitstream;
- means for replacing original codewords in the bitstream with alternate codewords having embedded data bits;
- means for replacing final codewords in the bitstream with replaced codewords wherein the replaced codewords have a LAST coefficient = 0; and

means for appending alternate codewords to the replaced codewords wherein the appended codewords = "0111s" wherein the "s" represents the embedded data bit.